

ABSTRACT OF THE DISCLOSURE

A flat or curved photochromic laminate structure and a plastic photochromic lens blank can be produced in a simple and efficient manner from relatively low-cost polymeric sheet materials. These laminates can be used to provide goggles, face shields, windows, window coverings, skylights, and optical lenses having efficient, uniform and high quality photochromic properties. The use of a polyesterurethane as the binder for the photochromic material has been found to improve the performance of the photochromic material. There may be a desire to have a protective exterior layer (e.g., an abrasion resistant layer) in combination with the lens system, but that may be provided in various methods. In the case of using the laminate in a goggle application, the laminate may be hard coated on one or both outer surfaces with an abrasion resistant coating, antireflective coating, and/or an anti-fog hard coating.